

Course Syllabus

CIT 180 — Database Concepts and SQL College of Southern Nevada Fall 2021

PROFESSOR: Dr. Kate Pulling

E MAIL: Use Canvas course mail

WEBSITE: <http://bellagio.csn.edu/~kpulling/DrKatePulling/>

OFFICE HOURS (USING BIGBLUEBUTTON CONFERENCES): Mon: 6:10 – 7:00 PM; Thu: 5:10 – 6:00 PM; and by appointment.

CLASS LOCATION & TIMES: This is a three-credit course that meets three hours per week for the sixteen weeks of the semester, which runs from 30 August through 19 December. Class meets Wednesdays, 2:00 PM–4:50 PM in room C 133 on the West Charleston campus.

CATALOG DESCRIPTION: Basic principles of data modeling and relational database design. Hands-on learning of Structured Query Language (SQL). Prerequisite: IS 115 or Instructor approval.

REQUIRED TEXTBOOKS:

Joel Murach, *Murach's MySQL, 2nd edition*, ISBN 978-1-890774-82-0.

Allen, Gove, Jackson, Robert, Hansen, Gary, *Essentials Plus of SQL: Extracting Data* (e-book), ISBN 978-1-7339969-7-6.

RESOURCES (SOFTWARE): This class will use MySQL as the platform for learning SQL. The electronic book by Allan, Jackson and Hansen includes a Database Management system. Each student has his or her own personal database sandbox. You will be able to use the MySQL dialect of SQL to create tables and populate them with data, to change the structures of tables and to query tables. You will be able to access the ebook and the data tables using a browser and the internet.

MySQL Workbench will be used to aid in the design of databases. Version 8.0 is available for download to your home computer from <http://www.mysql.com/downloads/workbench/>). For Windows, go to the section **Other Downloads** to download only Workbench (mysql-workbench-community-8.0.26-winx64.msi). For other operating systems, select the OS in the drop-down list and download the mysql-workbench-community-8.0.26 option for your OS.

No additional resources are required.

COURSE OBJECTIVES: This course will provide you with a solid understanding of the relational database model and of the theory behind SQL. Furthermore, it will address the needs of both the user and the developer. From the user's standpoint you will become proficient at translating information needs into appropriate SQL statements. From the developer's standpoint you will gain experience in designing databases which conform to the relational model. Specifically, when you successfully complete the course, you will be able to

- Explain the fundamental concepts of relational database design.
- Illustrate the structure of a database with diagramming software.
- Demonstrate normalization of data tables.
- Use a database management system's tools to communicate with the database and to issue commands.
- Use SQL commands to create tables and to insert, update and delete table data.
- Code SQL queries to extract information from databases.
- Create an SQL-based information system that will satisfy the requirements of a case study.

MEASUREMENT OF OBJECTIVES: You will know you are meeting the stated course objectives as you successfully

- complete exercises that teach and reinforce the skills and techniques covered in the course,
- attend class and participate in class activities, and
- pass exams and complete projects that require you to demonstrate mastery of concepts and skills.

These activities result in points that are accumulated during the semester. The final point total determines the grade you earn.

GRADING POLICY: The following are the requirements of the course, their points and weights, and the minimum accumulated points for each letter grade:

Requirements	Points	Weight	Letter Grade	Minimum Points
Exam 1: 29 Sep	70	17.5%	A	360
Exam 2: 3 Nov	70	17.5%	B+	330
Exam 3: 8 Dec	70	17.5%	B	300
Database Design Project Due: 15 Dec	100	25.0%	C+	270
In-class Weekly Activities	90	22.5%	C	240
Total	400	100.0%	D	200
Comprehensive Final Exam: 15 Dec	70	17.5%	F	0
<i>There will be no opportunities for extra credit!</i>				

NOTE: Instructors do not have the option of withdrawing students. If you wish to receive a *W* in lieu of a grade, you MUST withdraw yourself officially from the class. Once you have withdrawn (dropped), you must discontinue attending class. Alternatively, you may wish to change from Credit to Audit and continue to attend the class.

You are strongly encouraged to discuss your options with an academic counselor, academic adviser or success coach AND Student Financial Services (if applicable), because these decisions may affect your financial aid and Satisfactory Academic Progress. Students receiving financial aid may find their awards reduced.

The Fall 2021 deadlines for the 16-week session are as follows:

- **Withdrawal:** Friday, 5 November 2021.
- **Change from Credit to Audit:** Friday, 5 November 2021.

Use this form: https://at.csn.edu/sites/default/files/documents/auditing_classes_form_o.pdf. Print the form and fill it out, check the boxes, sign and date. Submit the completed form in person at the Registrar's Office. Or scan or photograph the signed form and send it, using your CSN student email, along with a clear color copy of your state ID to MyCSN.Updates@csn.edu.

EXAMS: There will be three in-class exams. The dates of the exams are given above and in the weekly schedule. Every effort should be made to take the exams at the announced times. *No make-ups will be given.* At the end of the semester, there will be a comprehensive final exam covering all of the course material. Your score on the final exam may be used to *replace* your score on *one* of the in-class exams. All exams will require the use of MySQL, some will also require use of MySQL Workbench.

IN-CLASS EXERCISES: Class time will be used to expand upon, refine and practice techniques presented in the textbook, as well as to develop new material. In preparation for each class you should complete reading assignment and any assigned exercises; review previously covered material. For each class, have the Murach textbook, paper, a writing implement available. If you miss class, you are still responsible for the material. You will have to get notes from another student.

DATABASE DESIGN PROJECT: You will design and implement a normalized database to meet the needs of a case study and write queries to answer specific questions of the database. *No late projects will be accepted.*

HOMEWORK: There are no graded homework assignments in this course. However, some assignments will be made that should be completed for review in the next class.

REQUIRED EXTRA- OR CO-CURRICULAR ACTIVITIES: All activities are based on class activities, projects and exams assigned throughout the course. There are no required extra activities for this class.

ADDITIONAL FEES: There are no additional fees for this course.

WEEKLY SCHEDULE:

Week	Wednesday	Planned Topic/Activity (Complete reading assignment BEFORE class)
1	1 Sep	Introduction (Murach: Ch. 1; Allen, et al.: Ch. 1)
2	8 Sep	Single-table queries (Murach: Ch. 3; Allen, et al.: Ch. 2)
3	15 Sep	Single-table queries, continued; Multi-table queries (Murach: Ch. 4; Allen, et al.: Ch. 3)
4	22 Sep	Multi-table queries, continued
5	29 Sep	Exam 1
6	6 Oct	Insert, update, delete data (Murach: Ch. 5; Allen, et al.: Ch. 6)
7	13 Oct	Database design (Murach: Ch. 10)
8	20 Oct	MySQL Workbench, Data types (Murach: Ch. 8)
9	27 Oct	Create databases, table, indexes (Ch. 11)
10	3 Nov	Exam 2
11	10 Nov	Database Design Tools
12	17 Nov	Summary queries (Murach: Ch. 6; Allen et al.: Ch. 4); Database Design Project distributed.
13	24 Nov	Subqueries (Murach: Ch. 7; Allen, et al.: Ch. 5)
14	1 Dec	Functions (Murach: Ch. 9)
15	8 Dec	Exam 3
16	15 Dec	Comprehensive Final Exam Database Design Project Due

DISCLAIMER: This syllabus is subject to change as deemed appropriate by the instructor and with advanced notification.

NOTE: If you have any concerns about this course and/or me, please contact me first. If I cannot resolve your issue, please contact the CIT Department Office at 702-651-5976. You will be directed to the appropriate Program Director or to the Department Chair. You will remain anonymous, if possible, and all communications will be strictly confidential. Please DO NOT wait until the last minute to make your concerns known to me and/or to the CIT Department.

Student Behavior

GROUND RULES: You and your fellow students want to get the most out of this course. This will be possible only if everyone follows these guidelines:

- Treat fellow students and your professor with courtesy and respect.
- Join the class meetings on time and be ready to get to work and to learn.
- During class meetings keep your attention on the class. Put away cell phones and any other “messaging” devices. Ignore your emails.
- Safeguard classrooms and computers by not eating or drinking in the classroom.
- During class time use your computer for class work — no surfing the Internet, no reading e-mail, no playing games, etc.
- You do not have permission to record lectures. Under Nevada State Law recording of lectures is not allowed without explicit permission of the instructor.

STUDENTS' RIGHTS AND RESPONSIBILITIES: When you choose to become a student at CSN, you accept the rights and responsibilities of membership in CSN's academic and social community. You can find policies covering students, such as the Student Conduct, Students' Right to Know, Students' Academic Integrity, and Disruptive and Abusive Student in the following locations:

- Catalog and Student Handbook, in the Policies and Procedures section: <http://catalog.csn.edu/content.php?catoid=6&navoid=566>
- Policies and Procedures Webpage <https://www.csn.edu/policies-procedures>, look under the heading "Student Policies"

ACADEMIC HONESTY: CSN demands a high level of academic behavior. You are expected to complete your own work in this class. Cheating on exams or lab exercises is not fair to students who are honestly studying. Cheating is also subject to penalties, which can include getting a zero for the exam or lab exercise or failing the course. The full list of possible penalties is listed in the CSN Student Academic Integrity Policy. Please make yourself familiar with this document.: <https://at.csn.edu/documents/student-academic-integrity-policy>.

CSN STUDENT EMAIL: All students enrolled at CSN have a CSN Student Email account. Beginning February 1, 2020, all information from the college will be sent to your CSN-issued student email address (enrollment information, financial aid information, cashier information, college events, etc.). It is extremely important that you check your student email daily. You can access your student email through <https://www.csn.edu/gocsnlogin>.

Once you validate your student email address you will have access to Microsoft Office 365 for up to five devices and 1TB of OneDrive storage. *CSN email* has more information, including tutorials for Office 365 apps.

PUBLIC HEALTH DIRECTIVES (COVID-19) Students must follow all active CSN public health directives while enrolled in this class, such as properly worn face coverings when required in classrooms as well as inside campus buildings. Review CSN's public health directives at <https://at.csn.edu/covid-19>. Students who do not comply with these directives will be asked to leave the classroom. Refusal to follow the guidelines may result in further disciplinary action according to the CSN Student Conduct Code https://www.csn.edu/sites/default/files/documents/student_conduct_code_policy_1.pdf, including being dropped from the course.

Student Resources

CIT/CS/IS101/IS115 SOFTWARE LAB: The lab are a service of the CIT Department to provide specialized help for your CIT, CS or IS classes. For location/date/time information, please visit <https://at.csn.edu/cit-information>. Click on "Networking and Software Lab Hours."

The Software Lab monitors can assist with understanding of key concepts covered in your classes. A lab monitor may not be able to answer all questions, but he/she can refer you to external resources or to your instructor for additional help. A lab monitor cannot provide direct assistance with work related to assignments. Alert the lab monitor if your questions are specific to your homework assignments.

CENTERS FOR ACADEMIC SUCCESS: Centers for Academic Success (CAS) provides quality DROP-IN academic assistance to all students enrolled in for-credit courses at CSN. Tutors are available for most general education courses and some historically challenging courses. Academic learning support includes assistance with learning strategies, Canvas, Smarthinking online tutoring, Microsoft Office, reading, writing, oral presentations, math, and science. CAS tutors also provide support to study groups and assistance for placement test preparation. CAS is open Monday through Sunday to be more accessible to all students. Hours for all locations are Monday–Thursday 9:00 am to 6:00 pm and Friday–Sunday 11:00 am to 4:00 pm.

You may visit <https://www.csn.edu/centers-academic-success> for more details about online and in-person services. You may also contact us at one of our offices: Charleston Centers 702–651–5732, North Las Vegas Learning Commons 702–651–4232, Henderson Learning Commons 702–651–3125.

CSN LIBRARIES: The library provides support for students completing assignments that require research and the use of information. Librarians are available to students for one-on-one assistance locating and citing quality information either on-line at <https://library.csn.edu/ask/> or at any of the campus libraries. To find more information, go to the CSN Libraries' website <https://library.csn.edu/>.

"Safari Books Online" is of special interest to students in CIT courses. To access this digital library of technical books and videos, click on the **Browse Databases** button on the Library's homepage at <https://library.csn.edu/>, then click on the letter **S** to filter the databases. The link to "Safari Books Online" should be at or near the top of the resulting list.

Initially, you will have to enter your student email address, then create an account with Safari. Subsequently, you will use your email address and your **Safari password** to access the Safari resources.

PRINTING @ CSN: Printing in CSN classrooms, computer labs and libraries falls under the Print Wise initiative, designed to help save natural and fiscal resources. Print Wise provides each CSN student with a \$10 credit toward printing at the start of each semester, which will provide for up to 200 black and white copies at 5¢ a page, or 40 color copies at 25¢ a page. After that, you may put money into your account on-line or at a CSN Cashier's Office to purchase additional prints at the same rate. It is **your responsibility** to maintain your printing accounts to cover printing expenses during each semester.

For more information, visit <https://at.csn.edu/printwise>.

Computers are available in the Campus Computer Labs. Visit <https://at.csn.edu/computerlabs> for locations and hours.

ACADEMIC ADVISING: Academic Advisors help students assess academic strengths and limitations, learn academic success strategies, explore careers, declare a major, navigate the educational system, access campus and community resources, and connect to campus life. Contact Information:

- Charleston Campus: Building D – Student Services Area: 702–651–5670
- North Las Vegas Campus: Student Services Area: 702–651–4049
- Henderson Campus: Building B – Room 120: 702–651–3165

For more information about Academic Advising, please visit <https://www.csn.edu/advising>.

COUNSELING & RETENTION SERVICES: Counselors can help with these situations:

- Academic Challenges (self-referrals)
- Academic Warning / Probation / Suspension Appeals
- BAS-Project Management majors
- College and Community Resources
- College Success Strategies
- Financial Aid Warning / Suspension Appeals
- MyCoyotePLAN Early Alerts (instructor referrals)
- Returning Students

For more information about Counseling & Retention Services, please visit <https://www.csn.edu/counselingdepartment>.

COUNSELING AND PSYCHOLOGICAL SERVICES: The Counseling and Psychological Services (CAPS) offers short-term, problem-focused counseling to CSN students who may feel overwhelmed by the responsibilities of college, work, family, and relationships. Clinicians are available to help students cope with stresses and personal issues that may interfere with their ability to perform in school. The service is provided confidentially and free to currently enrolled students. To schedule an appointment, please call CAPS at WC (702) 651-5518, at NLV (702) 651-4099, and at HN (702) 651-3099.

FOOD AND HOUSING INSECURITY: Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is urged to contact Counseling & Psychological Services (CAPS), for a list of resources and support.

EARLY ALERT REFERRAL PROGRAM: This is a referral program to connect students with college resources when assistance is needed to achieve success. Referrals may be initiated by faculty and staff, as well by students themselves, through MyCoyotePLAN. After a referral is submitted, students will receive an email notification and will be contacted by the department to which they were referred to offer assistance.

DISABILITY RESOURCE CENTER: The College of Southern Nevada is committed to making physical facilities and instructional programs accessible to students with disabilities. If you have a disability that may have some impact on your work in this class and for which you may require accommodations, please visit the Disability Resource Center (DRC) so that such accommodations can be considered. All discussions will remain confidential.

The Disability Resource Center (DRC) has offices at all three campus locations as the focal point for coordination of services for students with disabilities. If you have a physical, emotional, or mental disability that “substantially limits one or more major life activities (including walking, seeing, hearing, speaking, breathing, learning and working),” and will require accommodation in this class, please contact the DRC at

- West Charleston: phone (702) 651-5644 or send an email to WCDRCStaff@csn.edu
- North Las Vegas: phone (702) 651-4045 or send an email to CYDRCStaff@csn.edu
- Henderson: phone (702) 651-3795 or send an email to HCDRCStaff@csn.edu
- Deaf and Hard of Hearing Services: phone (702) 651-4448 or send an email to Deaf.HH.Services@csn.edu

Students that receive accommodation letters, please meet with DRC to discuss the provisions of those accommodations as soon as possible.

Additional information at the DRC's webpage: <https://www.csn.edu/drc>.

Additional Information

IMPORTANT DATES IN THE COLLEGE CALENDAR:

- **Fall Semester 2021**
 - Monday, 30 Aug: First day of instruction
 - Monday, 6 Sep: Labor Day Holiday (No Classes - CSN Closed)
 - Friday, 29 Oct: Nevada Day Holiday (No Classes - CSN Closed)
 - Friday, 5 Nov: Last day to change from credit to audit
 - Friday, 5 Nov: Last day to drop a class WITH a grade of W
 - Thursday, 11 Nov: Veterans Day Holiday (No Classes - CSN Closed)
 - Thursday–Friday, 25–26 Nov: Thanksgiving Break (No Classes - CSN Closed)
 - Sunday, 19 Dec: Last day of instruction

EXCESS CREDIT FEE INFORMATION: Information about the Excess Credit Fee may be found at <https://www.csn.edu/excess-credit-information>.

TITLE IX RESOURCES: Information is available at <https://www.csn.edu/institutional-equity>.

Updated: 20 August 2021